**AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions, and listings, of claims

in the application:

**Listing of Claims:**

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1.     (Currently Amended)  A method for inserting a given node into ring

operations of an ATM ring, including ~~the steps of~~:

A.    ~~operating~~ operating the given node as a bypass for ATM traffic on the ring;

B.    ~~operating the given node to pass through virtual paths known to~~

~~the given node;~~

C.    ~~establishing connection to inter-ring management channel;~~

D.    ~~exchanging information between the given node and a ring hub to~~

~~operate~~ operating the given node as a pass through for the ATM traffic on other

existing virtual path connections on the ring before a virtual path is established

for the given node;

E.    assigning to the given node one or more virtual paths to direct

traffic to and from the given node over the ring;

F.    communicating the virtual path assignment to ~~all~~ other nodes on

the ring to establish the assigned virtual path on the ring; and

G.    providing to the given node connection information for ~~all of the~~

virtual paths and virtual circuits on the ring.

2.    (Original) The method of claim 1 wherein the step of providing connection information to the given node includes providing routing tables to the given node.

3.    (Currently Amended) The method of claim 2 wherein the step of providing connection information further includes providing the information from ~~the~~ a hub node to the given node.

4.    (Currently Amended) The method of claim 3 wherein the step of providing connection information further includes:

    ~~i.~~——providing an error checking code with the information, and

    ~~ii.~~——at the given node checking the information with the error checking code to determine that the information is correct.

5.    (Currently Amended) The method of claim 1 wherein the step of assigning the virtual path to the given node further include

    ~~i.~~——the given node requesting the assignment from ~~the~~ a hub node, and

    ~~ii.~~——the hub node responding to the request with the assignment.

6.      (Currently Amended) The method of claim 1 wherein the step of communicating the vitual path assignment to ~~all of the~~other nodes includes updating routing tables maintained by the other nodes.

7.      (Currently Amended) The method of claim 1 wherein the step of communicating the virtual path assignment to ~~all of the~~other nodes includes providing to the other nodes call set up information for calls over the newly assigned virtual path.

8.      (Currently Amended) The method of claim 1 further including the steps of

~~F.~~establishing connections to and from the given node over the assigned virtual path; and

~~G.~~tearing down connections over the assigned virtual path.

9.      (Currently Amended) The method of claim 8 wherein the step of communicating the virtual path assignment to ~~all of the~~other nodes includes updating routing tables maintained by the other nodes.

10.     (Original) The method of claim 9 further including updating the routing tables with call set up and tear down information associated with the one or more virtual paths assigned to the given node.

11.    (Original) The method of claim 1 further including the step of, at the given node, shaping traffic over the virtual circuits associated with the established connections on the ring.

12.    (Currently Amended) A method for removing a failed node from an ATM ring, the method including the steps of:

   A.——determining that a ~~given~~ node has failed;

   B.——tearing down virtual circuit connections directed to or initiating from the failed node;

   C.——tearing down virtual paths assigned to the failed node; and

   D.——providing instructions to ~~the remaining~~other nodes on the ring ~~updated~~ to update ring topology information ~~that excludes the failed node~~at the other nodes, the updated ring topology information indicating that the failed node is removed from the ring.

13.    (Currently Amended) The method of claim 12 wherein

   i.——the step of determining that ~~the given~~a node has failed includes having a ring hub node determine the failure, and

   ii.——the steps of tearing down the virtual circuit and virtual path connections are controlled by ~~the~~a hub node.

14. (Currently Amended) A method for inserting a given node into ring operations of an ATM ring and removing a failed node from the ring operations, the method including ~~the steps of~~:

    A.~~——~~operating the given node as a bypass for ATM traffic on the ring;

    ~~B.    placing all other known virtual paths in by-pass mode;~~

    ~~C.    establishing connection to inter-ring management channel;~~

    ~~D.    exchanging information between the given node and a ring hub node to operate~~<u>operating</u> the given node as a pass through for the ATM traffic on existing connections on the ring<u> before a virtual path is established for the given node</u>;

    ~~E.~~——assigning to the given node one or more virtual paths to direct traffic to and from the given node over the ring;

    ~~F.~~——communicating the virtual path assignment to ~~all~~<u>other</u> nodes on the ring<u> to establish the assigned virtual path on the ring</u>; and

    ~~G.~~——providing to the given node connection information for ~~all of the~~ virtual paths and virtual circuits on the ring<u>;</u>

    <u>tearing down connections directed to and initiating from a failed node; and</u>

    <u>instructing non-failing nodes on the ring to update ring topology information</u>.

15.  (Original) The method of claim 14 wherein the step of providing connection information to the given nodes includes providing routing tables to the given node.

16.  (Currently Amended) The method of claim 15 wherein the step of providing connection information further includes providing the information from ~~the~~ a hub node to the given node.

17.  (Currently Amended) The method of claim 15 wherein the step of providing connection information further includes

~~iii.~~ providing a error checking node with the information, and

~~iv.~~ at the given node checking the information with the error checking code to determine that the information is correct.

18.  (Currently Amended) The method of claim 14 wherein the step of assigning the virtual path to the give node further includes

~~iii.~~ ~~the given node~~ requesting, at the given node, the assignment from ~~the~~ a hub node, and

~~iv.~~ ~~the hub node~~ responding to the request, at the hub node, with the assignment.

19. (Currently Amended) The method of claim 14 wherein the step of communicating the virtual path assignment to ~~all of the~~other nodes includes updating routing tables maintained by the other nodes.

20. (New) The method of claim 1, further including:

establishing a connection for the given node with an inter-ring management channel; and

exchanging pass through information between the given node and a hub node on the ring via the inter-ring management channel, the pass through information being used to operate the given node as a pass through.

21. (New) The method of claim 12, wherein the determining step determines that a node has failed based on a failure by the failed node to communicate with a ring hub node.

22. (New) The method of claim 14, further including:

detecting a failure with respect to the failed node in response to the failed node failing to communicate with a hub node.

23. (New) The method of claim 14, wherein said connections includes at least one of virtual paths and virtual circuit connections initiating from or destined to the failed node.

24.     (New) A ring network for conducting asynchronous transfer mode (ATM) communications, comprising:

a plurality of ring nodes operably connected via a plurality of virtual paths, each virtual path being used to direct traffic from an initiating ring node to a destination ring node; and

a ring hub node configured to instruct a newly-inserted ring node to operate as a pass through from ATM traffic via the virtual paths until one or more new virtual paths are established for the newly-inserted ring node.

25.     (New) The ring network of claim 24, wherein the ring hub node is further configured to assign the new virtual paths to direct traffic to and from the newly-inserted ring node.

26.     (New) The ring network of claim 24, wherein the ring hub node is further configured to provide connection information to the ring nodes, the connection information corresponding to virtual paths and virtual circuits on the ring network.

27.     (New) The ring network of claim 24, wherein the ring hub node is further configured to

detect a failure of one of the ring nodes; and

tear down, in response to the detected failure, connections on the ring network directed to or initiating from the failed ring node.

28.    (New) The ring network of claim 27, wherein the ring hub node is configured to detect the failure in response to the failed ring node failing to communicate with the ring hub node.

29.    (New) The ring network of claim 24, wherein the ring hub node is further configured to provide instructions to the non-failing ring nodes to update ring topology information at the non-failing ring nodes, the updated topology information indicating that the failed ring node is removed from the ring network.